US Army Ordnance Corps Hall of Fame Nomination

NOMINEE DATA

NOMINEE'S NAME: Henry Spiese Aurand

RANK/GRADE: Lieutenant General, USArmy Retired

TITLE AT RETIREMENT: Commander, U.S. Army Pacific

DATE AND PLACE OF BIRTH: 21 April 1894 Tamaqua, Pennsylvania

DATE RETIRED: 1952

DATE DECEASED: 1980

LAST DUTY POSITION/OCCUPATION:
Commanding General, U.S. Army Pacific

PUBLICATIONS/CONTRIBUTIONS TO PERIODICALS:

Multiple Articles in Army Professional Journals to include: Army Ordnance "Arms for Our Allies: The Organization and Functions of the Lend-Lease Program"—September-October 1942

FM9-5 Ordnance Field Manual, 1932

SIGNIFICANT CITATIONS AND AWARDS:

Distinguished Service Medals (2OLC)
Bronze Star Medal
Mexican Service Medal
World War I Victory Medal
American Defense Medal
American Campaign Medal
Asian-Pacific Campaign Medal
European-African-Middle Eastern Medal
World War II Victory Medal
Foreign Awards-Not Specified

SIGNIFICANT ASSIGNMENTS/DUTY POSITIONS:

1915-1917	Coast Artillery Assignments and Army Ordnance School.
1917-1919	Proof Officer, Sandy Hook Proving Grounds.

1919	Ordnance Corps Representative, Coast Artillery Board.
1920	Dept Ordnance Officer, Southern Dept, San Antonio, TX.
1 July 1920	Formally transferred to Ordnance Corps
Sep 1920-Sep 1921	Adjutant and Disbursing Office, and short time as Commander, San Antonio Arsenal
1922-1924	First tour as Ordnance Officer, V Corps Area
1924-1925	Special Assignment to Chief of Ordnance. Wrote the Distribution Plan to the Army Industrial Mobilization Plan.
Jul 1925-Jul 1927	Ordnance Officer, Manila and Subic Bays.
1928-1929	Second tour as Ordnance Officer, V Corps Area
1929-1930	Faculty, Ordnance School, Watertown Arsenal. Served as Chief Instructor for the OD Field Service Course.
1931-1933	Chief, Ordnance Field Service Branch, Raritan Arsenal. Again taught OD Field Service Course after the School moved from Watertown Arsenal.
1933-1937	Logistics Instructor Army War College.
1937-1939	Chief, Technical Group, Picatinny Arsenal.
May 1940-Sep 1942	Chief, Plans and Requirements, Army G4

In this period the Army G4 went through many organizational changes. LTG Aurand was also:

1941 Defense Aid Director of the War Department
1942 Chief of the International Division, Army Service Forces
1942 Secretary of the Combined Production Board)

Oct 1942-Oct 1944	CG, Sixth Service Command, Chicago, IL.
Oct-Nov 1944	Assistant Chief Ordnance Officer, European Theater of Operations (ETOUSA) and Communications Zone (ComZ)
Nov 1944-Apr 1945	CG, Normandy Base Section, ComZ, ETOUSA
May-Nov 1945	Last CG, United States Services of Supply, China Theater (US SOS CT).
Jan-May 1946	Last CG, Africa-Middle East Theater.
Jun 1946-Nov 1947	Director of R&D, War Department
Nov 1947-Apr 1949	Director of Logistics, Dept of the Army.
Apr 1949-Aug 1952	CG, U.S. Army Pacific

EDUCATION:

Army Ordnance School (1916)
Command and Staff College (1928)
Army War College (1931)
Army Industrial College (1940)

LIST OF POSSIBLE SOURCES OF INFORMATION ABOUT THE NOMINEE:

Eisenhower Presidential Library, Abilene, Kansas holds the Aurand Papers. A list of the holdings is at http://www.eisenhower.utexas.edu/listofholdingshtml/listofholdingsA/AURANDHENRYSPapers18731967.pdf. Dr Jim Leyerzapf is the archivist.

Oral History, part of the Senior Officers Debriefing Conversations, Carlisle Barracks, PA 17013. On line at: http://www.carlisle.army.mil/cgi-bin/usamhi/DL/showdoc.pl?docnum=90

Green, C., Thomson H., & Roots P. (1955). *Technical Services, The Ordnance Department: Planning Munitions for War*. pp 3,7. U.S. Army: Washington.

Motter, T.H. *The Middle East Theater: The Persia Corridor and Aid to Russia*. p. 75. U.S. Army. Washington D.C. 1952

Article by Aurand in Army Ordnance. "Arms for Our Allies: The Organization and Functions of the Lend-Lease Program," Vol 23, Sept-Oct 1942, pp. 301-302

Ulbrich, David. "Logisticians Need Practice: Comparing the Pre-war Military Careers of Montgomery Meigs and Henry Aurand," Logistics Spectrum, Jul-Sep 2000, pp. 32-34.

SIGNIFICANT CONTRIBUTIONS TO U.S. ARMY ORDNANCE:

Lieutenant General Henry Spiese Aurand was born 21 April 1894 in Tamaqua, Pennsylvania. He graduated number twenty out of one hundred sixty-five cadets from West Point, and was commissioned into the Coast Artillery Corps in 1915. However, Aurand's professional goal was to be an Ordnance Officer as soon as he had served a Combat Arms qualifying tour. In 1920 he was assigned to Ordnance where he spent nearly thirty-five years of his military career. LTG Aurand made many significant contributions to the Ordnance Corps. Some of the most important were:

Ability to rapidly work requirement determination based on plans and projections: LTG Aurand was able to quickly and intuitively see the importance of certain aspects of a plan. He worked with the British and other allies to develop comprehensive requests for materiel during Lend-Lease. His most important requirements computations were those for industrial build-up and production that became known as the Victory Plan for WWII. His numbers were often used at the highest level and one set of numbers was used without change in a State of the Union Address. His ability to scientifically compute and to defend requirements was integral to support of the Lend-Lease Act while ensuring that the U.S. Army had minimal acceptable levels of material for its own training and war fighting needs. During his tenure as the lead of War Department Lend-Lease, Aurand also ensured that facilities required for US military production were not converted to produce foreign specification materiel.

Teaching of the Ordnance Field Service Course and writing The Ordnance Field Manual: Aurand taught the Ordnance Field Service Course during two different assignments. In his first stint he realized that the Ordnance Corps did not have a data or textbook like he had been issued while a student at Leavenworth. He determined to write the Ordnance Field Manual, first

published in 1932. Later versions of his FM, published in 1939 and 1942, were used by the Army throughout WWII. Aurand was especially satisfied to find successful WWII ammunition dumps laid out as he had prescribed in the FM. He watched a V-1 rocket land in an ammo dump and only detonate the ammunition where it landed. His rules on net explosive weight, protective barriers, and separation distance worked perfectly to contain the blast.

Teaching at the Army War College as a Logistics Instructor: While assigned in the Philippines from 1925-1927 Aurand worked for LTG Stanley Embick (then a Colonel and later Chief of Army War Plans). Embick had Aurand write papers on the use of rail in wartime and instructed him in the idea of "logistics" as opposed to ammunition, supplies, transportation, procurement, and R&D. While teaching at the AWC Aurand pressed this point home and was one of the first officers to think in holistic logistics terms rather than as the discrete technical services.

Planning: Aurand worked the first Army Industrial Mobilization Plans in the interwar years. He argued that the logistics planning should be done first, then operations plans. In this way the operations planners would know the available resources the nation could commit to operations. This would allow Operations Planners to produce logistically feasible plans. As Army DOL he gained agreement to link up logistics and operations planners in planning cells. This led to greater cooperation and increased understanding of logistics on the part of G3 planners. Aurand was also a planning innovator in other ways. In the 1930's he wrote criticisms of planning methods that separated manpower and supply requirements. He argued that the two sets had to be considered together to develop comprehensive requirements.

New ideas: In 1919 Aurand experimented and developed flashless gunpowder by adding rock salt. This was after WWI when visual spotting of gunpowder flash was critical in counter battery fire. He attempted to patent his work.

Aurand was the first person to fire the 3" antiaircraft gun at 90 degrees elevation (straight up). He did this to determine the direction of drift caused by barrel rifling.

Aurand was instrumental in ensuring the Army bought and distributed the ¼ General Purpose vehicle (Jeep). Without his interventions the developer of the Jeep would not have been offered an Army contract.

Aurand was one of the first to recognize the importance of computers to supply management. During the Louisiana Maneuvers he saw a team from IBM using punch cards. He tried to get supply managers to use the cards, but was unsuccessful. In 1944, as CG of the Normandy Base Section, he had all the ammunition supply data put on punchcards and used them to manage assets.

Ordnance Infrastructure: While assigned as the Proof Officer at Sandy Hook Proving Grounds Aurand helped design the technical facilities at Aberdeen PG and was then assigned to oversee construction.

LTG Aurand was as instrumental as a Commander as he was as a planner and teacher. In WWII he was assigned as the CG, Normandy Base Section and commanded that unit during the Battle of the Bulge. His forces were critical top forwarding supplies and freeing up men to assist in the counterattack. During this time he was revolutionary in his use of Black units giving them unheard of levels of authority and responsibility. He believed that Black units could perform as well as any other when their officers were trusted and empowered to command. He also used IBM punchcards to manage ammunition inventory.

Due to his success and reputation as a logistician Aurand was assigned as the CG, Services of Supply, China Theater and then as the last CG of the US Africa-Middle East Theater. In both cases his responsibilities were to support the US soldiers in theater and then close out the theaters selling or retrograding materiel to CONUS. He went on to be the Director of Army R&D and then Army Director of Logistics after the creation of the DoD. He was so successful in these command and Army level staff positions that LTG Aurand, an Ordnance Officer, was assigned at the CG, US Army Pacific in 1949 and served in that position through most of the Korean Conflict. While CG, ARPAC his ability to sense requirements was again proven. After meeting with Far East Command planners in the spring of 1950 he returned to Hawaii and trained the 5th Regimental Combat Team, his only combat unit, to 8th Army standards. The 5th RCT was one of the first reinforcement units shipped to Korea and was instrumental in the defense of the Pusan Perimeter because they so quickly assimilated into 8th Army.

General Aurand was a skilled logistician who served as a catalyst in reforming the U.S. Army's logistical systems. He was directly involved in many changes pertaining to logistics and ordnance. As early as 1935 he was developing logistics principles that sound familiar to modern Ordnance officers. His first two principle of logistics were: "Troops in action should never have to turn their backs on the enemy to fetch further supplies." and "Troops should not be encumbered with supplies beyond immediate needs." He also developed five logistics characteristics: certainty, simplicity, convenience, mobility, and flexibility. These are very close to the logistics characteristics we use today.

Lieutenant General Henry Spiese Aurand's contributions to Ordnance and Army logistics are extensive and continue today. He pioneered new methods of logistical process, authored dozens of ordnance articles and books, and stood as the vanguard of logistical Army reform.